

ABSTRACT OF THE DISCLOSURE

A chill assembly for chilling a molten material during formation of a part is disclosed. The chill assembly includes an upper platform and a mold platform for receiving a mold package to be filled with the molten material to form the part. The
5 upper platform has a first platen moveable in a vertical direction relative to the molding platform. A plurality of chills are moveably supported by the first platen for quenching the molten material. Each of the chills are moveable between a pre-chill position and a post-chill position. An alignment sub-assembly engages the chills and aligns the chills in the pre-chill position. The alignment sub-assembly re-
10 aligns the chills after the chills have quenched the molten material and moved to the post-chill position. The alignment sub-assembly is capable of precisely aligning and re-aligning the chills after each successive quenching of the molten material.

PRELIMINARY CLASSIFICATION: 164/371; 164/352